

AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121 the following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented): A semiconductor device, comprising:

a semiconductor element with an area for a main surface of 1 mm^2 or greater;

a substrate having a thermal conductivity of 170 W/m-K or greater and having an upper surface on which said element is mounted and a bottom surface which is positioned on the opposite side; and

a ratio H/L being greater than or equal to 0.3 but less than 1.25, with L being the length in the long direction of a main surface of said semiconductor element, and H being the distance from a semiconductor element mounting part on said upper surface of said substrate to said bottom surface.

2. - 3. (Canceled)

4. (Previously Presented) The semiconductor device according to claim 1, further comprising:

a ratio of Y/L being equal to or greater than 2, with Y being the distance from one end of the bottom surface of the substrate to the opposite end of the bottom surface of the substrate along the same plane as L .

5. (Previously Presented) The semiconductor device according to claim 1, wherein the thermal conductivity of the substrate is equal to or greater than 200 W/m-K .

6. (Previously Presented) The semiconductor device according to claim 1, wherein the ratio H/L is greater than 0.45 but less than 1.25.

7. (Previously Presented) The semiconductor device according to claim 1, wherein the distance H is greater than or equal to 0.3 mm but less than or equal to 10 mm.

8. - 18. (Canceled).

19. (Previously Presented): A semiconductor device, comprising:

a semiconductor element with an area for a main surface of 1 mm^2 or greater;

a substrate having a thermal conductivity of 170 W/m-K or greater and having an upper surface on which the semiconductor element is mounted and a bottom surface which is positioned on the opposite side;

a metal layer formed on the upper surface of the substrate; and

a ratio H/L being greater than 0.3 but less than 1.25, with L being the length in the long direction of a main surface of said semiconductor element, and H being the distance from a semiconductor element mounting part on said upper surface of said substrate to said bottom surface.

20. (Previously Presented) The semiconductor device according to claim 19, wherein a maximum roughness R_{max} of the metal layer is in a range of 0.1 to 20 micrometers.

21. (Previously Presented) The semiconductor device according to claim 19, further comprising:

a hole formed in the substrate;

a pin disposed within the hole that supplies power to the semiconductor element; and

an insulating material which fills a space between the inner surface of the hole and the pin.

22. (Previously Presented) The semiconductor device according to claim 19, further comprising:

a terminal plate that supplies power to the semiconductor element;

a connection member which connects between the substrate and the terminal plate.

23. - 25. (Canceled).